

NOTES ON SOME QUEENSLAND FISHES

by G. P. WHITLEY

(Plates XIII-XIV, figures 1-5).

In May 1964, I spent some recreation leave at Karumba, on the Gulf of Carpentaria, Queensland, where, thanks to facilities afforded by Mr. Ian S. R. Munro, Project Leader of the Gulf Prawn Survey, I was able to see many interesting fishes which had been caught besides the prawns. Notes on a few of them are recorded here, also some on other Queensland fishes. Thanks are also due to Miss Helen Ashton for some of the illustrations.

Family GALEIDAE.

Genus GALEOLAMNA Owen, 1853.

Subgenus LAMNARIUS Whitley, 1943.

GALEOLAMNA (LAMNARIUS) SPENCERI (Ogilby).

(Figure 1.)

Carcharias spenceri Ogilby, 1911, Proc. Roy. Soc. Qld., 23(1):3. Brisbane River, Qld.

Galeolamna (*Lamnarius*) *spenceri* Whitley, 1943, Proc. Linn. Soc. N.S.Wales, 58: 119, fig. 3 (q.v. for refs.).

Carcharlinus spenceri Garrick & Schultz, 1963, Sharks and Survival: 35.

Eulamia spenceri Stead, 1963, Sharks and Rays Austr. Seas: 86 & 200.

Galeolamna spenceri Whitley, 1964, Rec. Austr. Mus., 26: 159.

This is a whaler shark with dental formula $\frac{12.1.12}{11.1.11}$, no interdorsal ridge,

a bluntly rounded snout, no conspicuous colour-markings and general facies as figured here. The biometrics of the Karumba specimen described below agree well with example E in my 1943 table but the width of the mouth is only 66 mm. and the labial folds are minute. Head broadly rounded, 4.2 in total length, its profile rising convexly to the long-based first dorsal fin. Teeth in upper jaw typically as long as broad, not notched, hardly deflected, each with about 17 coarse serrae along each edge. Symphyseal tooth minute, serrated in upper and entire in lower jaw. Teeth of lower jaw more erect and shouldered, serrated on shoulder and cusp. No conspicuous row of pores behind eye. Nostrils crescentic, with slight flap. Interorbital convex.

Body fairly robust, depth 6.5 in total length. Denticles crossed by 3 or 4 carinae. Preanal length less than postanal length. Caudal pit above and below. Interdorsal space greater than distance from eye to first dorsal origin. No interdorsal ridge. No umbilical scar. Snout to upper caudal pit, 505 mm.; upper caudal lobe, 221.

Pectoral angle reaches below anterior fifth of first dorsal base; no bite-marks. Origin and end of anal fin behind levels of those of second dorsal. 185 vertebrae, the 25th opposite origin of first dorsal fin; 51st opp. that of ventral fin; 65th opp. that of second dorsal fin; 69th opp. that of anal fin, and there are 88 to base of caudal.

Colour after death pale grey, slightly darker edges to fins; no dusky lateral streak. Eye silver with blue ring and pupil. Edge of dark dorsal colour passing over eye.

Described and figured from an immature female, 726mm. or 29 inches overall length. Stomach contained the pectoral girdle of a fish (*Polydactylus*) and the head of a prawn (*Metapenaeus*, probably *M. eboraensis*). Australian Museum regd. no. IB.7139.

Loc.—Karumba, Gulf of Carpentaria, Queensland; handline from beach, May 1964.

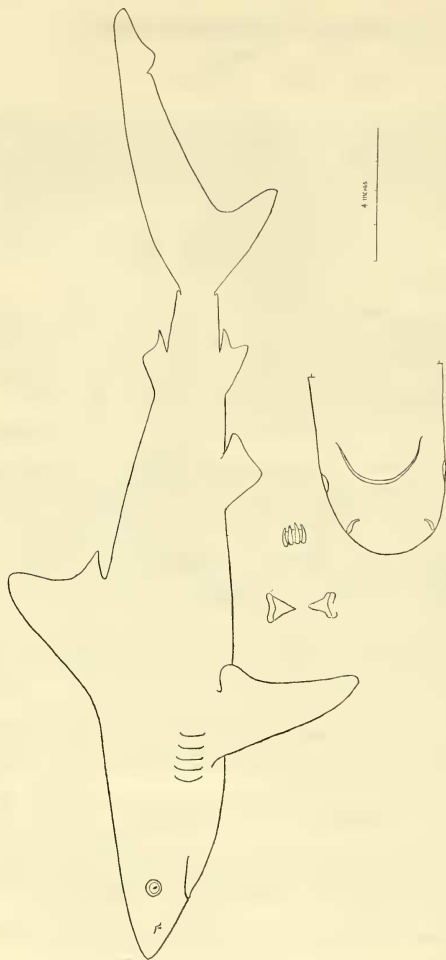


Figure 1—Whaler Shark, *Galeolamna (Lamnarius) spenceri*, Queensland. Inset:
upper and lower tooth, denticle, and ventral view of head.

G. P. Whitley & H. Ashton del.

Family PLOTOSIDAE

Genus NEOSILURUS Steindachner, 1867.

NEOSILURUS BREVIDORSALIS (Gunther).

(Figure 2).

Copidoglanis brevidorsalis Gunther, 1867, Ann. Mag. Nat. Hist. (3)20: 66. Cape York, Queensland and Nicol Bay, W. Australia.*Id.* Macleay, 1881, Proc. Linn. Soc. N.S.Wales 6:207; Cat. Austr. Fish. 2, 1882:143.*Id.* Weber, 1913, Nova Guinea 9: 526, 527, 530, 532, 604 and 607 (Lorentz River, New Guinea).*Id.* Weber and Beaufort, 1913, Fish. Indo-Austr. Archip. 2:241.*Neosilurus brevidorsalis* Steindachner, 1867, Sitzungsab. Akad. Wiss. Wien 56(1): 319 (Cape York. Described). *Id.* Troschel, 1870, Archiv

Naturges. (Weigmann) 36 (4): 276 Cape York. Sex-dimorphism.

A female without ventral fins. But see Gunther, 1873, Zool. Rec. 1871, Pisces: 104, for discussion. *Id.* Ogilby, 1908, Ann. Q'ld. Mus.9:14. *Id.* Weber, 1911, Abh. Senckenb. Naturf. Ges. 34:21 (AruIslands). *Id.* Whitley, 1938, Rec. Austr. Mus. 20:223 (Upper FlyRiver, New Guinea). *Id.* Whitley, 1947, W.A. Nat. 1:53. *Id.* Whitley,1957, Australasian Aqua Life 2(6):10. *Id.* Munro, 1957, Fisheries

Newsletter, April 1957:16, Hbk. Austr. Fish. 10:42, no. 301.

Copidoglanis (Neosilurus) brevidorsalis Rendahl, 1922, Medd. Zool. Mus.

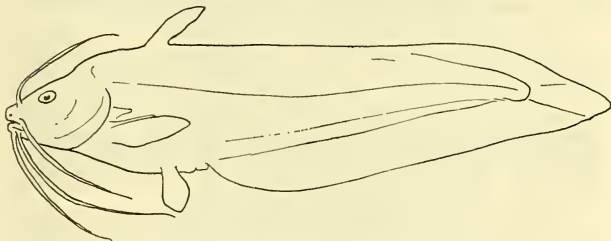
Kristiania 5:172.

Tandanus (Neosilurus) brevidorsalis McCulloch and Whitley, 1925, Mem. Q'ld.Mus. 8(2):134. *Id.* McCulloch, 1929, Austr. Mus. Mem. 5:57.

The bibliography of this species is here assembled and it is figured for the

first time from a Papuan specimen, from the Upper Fly River, 225 mm.

(nearly 9 inches) long (Austr. Mus. regd. no. IA.7224).

Figure 2—Catfish, *Neosilurus brevidorsalis*. Papuan specimen.

G. P. Whitley del.

Family SOLEIDAE.

Genus ASERAGGODES Kaup, 1858.

ASERAGGODES GUTTULATUS Kaup.

Aseraggodes guttulatus Kaup, 1858, Arch. Naturges., 24 (1): 103. No locality.*Id.* Chabanaud, 1927, Bull. Inst. Oceanogr. Monaco, 500: 14. *Id.*Chabanaud, 1930, Zool. Meded., 13: 185 & 190. *Id.* Chabanaud, 1931,Bull. Soc. Zool. France, 56: 302 & map. *Id.* Chabanaud, 1939,

Bull. Inst. Oceanogr. Monaco, 763:20.

Solea guttulata Gunther, 1862, Cat. Fish. Brit. Mus., 4: 477.*Solea kaiana* Gunther, 1880, Rept. Voy. Challenger, Zool., 1 (6): 49, pl. 21,fig. c. Kai Islands, 129 fathoms. *Id.* Gunther, 1887, Rept. Voy.Challenger, Zool., 22: 167. *Id.* Kamohara, 1934, Zool. Mag., 46: 462.

Aseraggodes kaianus Weber & Beaufort, 1929, Fish. Indo-Austr. Archip., 5: 152, 155 & 429. *Id.* Kamohara, 1939, Bottom-fishes Prov. Tosa :61-62. *Id.* Kamohara, 1952, Rept. Kochi Univ. Nat. Sci. (3): 84. *Id.* Ochiai, 1964, Faun. Japon., Soleina: 9, 20 & 32, pl. 10, text-figs. 10, 15-16.

Several examples from the Gulf of Carpentaria, netted by the Gulf Prawn Survey. One (regd. no. IB.7212) in Australian Museum.

New record for Australia.

Genus STRABOZEBRIAS Chabanaud, 1943.

Strabozebrias Chabanaud, 1943, Bull. Mus. Hist. nat. Paris, (2) 15: 293.

Type-species, *Synaptura cancellata* McCulloch. Also includes *S. craticula* McCulloch.

STRABOZEBRIAS MUNROI, sp. nov.

(Plate xiii)

D.68; A.58; P. (left) 8, (right) 5; V.3; C.15. L.lat. 93 on eyed and 100 on blind side. L.tr. 30/1/35 on eyed side, 40/1/40 on blind side.

Head (19 mm.) 4.7, depth of body (40) 2.27 in standard length (91). Eye (3) 6.3, snout (5) nearly 4, length of pectoral (1) 19 and length of caudal (16) 1.18 in head.

Snout not hooked, snub-nosed, chin prominent. Mouth shorter and more curved on blind side; lips entire, somewhat contorted. Eyes small, dextral, contiguous, without any scaly interspace but with a common translucent palpebral epidermis, the upper eye partly in advance of the lower. Nostril tubes simple, short. Gill-openings restricted.

Body covered with imbricate, strongly ctenoid scales on both sides, without cutaneous flaps. Scales of head same size as body-scales. Nine grooves in l.lat. scale. Dorsolateral line absent.

Origin of dorsal fin on front of head before eyes, its first ray not produced. Dorsal and anal rays simple, the last completely confluent with the caudal. Pectorals vestigial on both sides, that on the blind side longer than the other. Left ventral fin reduced, near vent. Right ventral connected with first anal ray.

Ground-colour cream or very pale yellow becoming white on the fins. Head and body (on eyed side) partly or entirely crossed by nine to twelve very irregularly shaped fawny-brown bars, the interior areas of which are lighter in tone, more like the ground-colour. These bars extend over the unpaired fins and become darkest brown above and below the tail-fin which is mostly white. Blind side pale yellow with the dark areas of the dorsal and anal fins showing through. Pectoral fins white. Eyes blue.

Described from the holotype, a specimen 91 mm. in standard length or 4½ inches overall. Australian Museum regd. no. IB.7210. Three paratypes, up to 5.3 inches in length, in the Gulf of Carpentaria Prawn Survey collection (Cat. no. 304) show no noteworthy variation apart from the colour-bars which are of different configuration in each.

Loc.—“Rama” trawl station no. 398, south-eastern corner of the Gulf of Carpentaria, Queensland: Lat. 17°32'20" S. by Long. 140°33'35" E., in 2½ fathoms. 26 November 1963.

The striking colour-markings and the largely white caudal fin are diagnostic. Can be added to the bottom of Norman's key* to “*Brachirus*” by appending: C. Head less than 5 in length. Nine to twelve irregular cross-bars. Tail mostly white

..... *Strabozebrias munroi*.

Named in appreciation of Mr. Ian S. R. Munro, Project Leader of the Gulf of Carpentaria Prawn Survey, most of whose collections are now housed in the Australian Museum, Sydney.

*Norman, 1926, Biol. Res. Endeavour, 5(5):292.

Family CALLYDONTIDAE.

Genus CALLYODON Scopoli, 1777.

CALLYODON TOSHI (Whitley).

(Figure 3).

Heteroscarus sp. Tosh, 1903, Parl. Rept. Mar. Dept. Qld. 1902-03: 20 & 23 (misprinted *Pecudoscarus*), pl. vi, fig. 3. Southport, Moreton Bay, Queensland, 12 inches long.

Callyodon cyanotaenia Ogilby, 1915, Mem. Qld. Mus. 3: 135. Not *Scarus cyanotaenia* Bleeker, 1854, Nat. Tijdschr. Ned. Ind. 6: 197, from Batavia which is a *Xanothos*.

Scarus sp. and *S. cyanotaenia* McCulloch and Whitley, 1925, Mem. Qld. Mus. 8: 169.

Scarus toshi Whitley, 1933, Rec. Austr. Mus. 19: 61. Southport, Queensland. Id. Schultz, 1958, U.S. Nat. Mus. Bull. 214: 12.

Callyodon toshi Whitley, 1964, Rec. Austr. Mus., 26 (5): 150.

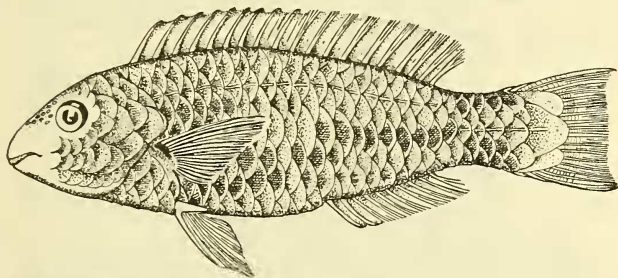


Figure 3—Parrot Fish, *Callyodon toshi*. Queensland.

Helen Ashton del.

Here illustrated from a specimen, 148 mm. in standard length and 7 inches overall, from Gillett Cay, Swain Reefs, Queensland. (Aust. Mus. Expedition, October, 1962). Austr. Mus. regd. no. IB.6086.

Family CHAMPSODONTIDAE.

Genus CHAMPSODON Gunther, 1867.

CHAMPSODON NUDIVITTIS (Ogilby).

Centropercis nudivittis Ogilby, 1895, Proc. Linn. Soc. N.S.Wales, (2) 10: 320. Maroubra, New South Wales.

Two examples of this species were trawled by Mr. T. Nielsen from 100 fathoms, off Cape Moreton (Austr. Mus. regd. nos. IB.7062-3). New record for Queensland.

Family OPISTOGNATHIDAE.

MEROGYMNOIDES, gen. nov.

Type-species, *Merogymnoides carpentariae*, sp. nov.

Diagnosis: A genus of Jawfishes with large scales which extend forward on the body to leave only small areas of the breast naked. The head is scaleless. Gill-rakers on first branchial arch 31. Maxillary shorter than head, its distal end truncate.

The dorsal spines are weak and flexible, not split. There is one anal spine and twelve rays and thirteen dorsal rays. Body without conspicuous markings.

Key to Genera of Opistognathidae.

- A. Dorsal spines pungent, cheeks and opercles with scales.
- B. Scales about 30 to 40 in longitudinal series.
- C. Gill rakers 38 on first gill-arch. Anal fin with 2 spines.
Dorsal and anal with about 12 rays each *Lonchistium* Myers, 1935.
- CC. Gill rakers 28. Anal fin with 3 spines. Dorsal and anal
rays 14 *Upsilonognathus* Fowler, 1946.
- BB. Scales over 55. Gill-rakers 64. Anal with 3 spines.
Dorsal and anal with 16 to 18 soft rays *Lonchopisthus* Gill, 1862.
- AA. Dorsal spines flexible, cheeks and opercles naked.
- D. Dorsal spines distally split into two lateral segments
..... *Stalix* Jordan & Snyder, 1902.
- DD. Dorsal spines distally entire.
- E. Trunk naked anteriorly.
- F. Scales small and very numerous, not extending
forward to pectoral base *Merogymnus* Ogilby, 1908.
- FF. Scales in about 50 rows or less, extending much
farther forward *Merogymnoides*, gen. nov.
- EE. Trunk fully scaled.
- G. Maxillary shorter than head, its distal end
truncate or notched.
- H. Eight dorsal spines *Gnathypops* Gill, 1862.
- HH. More than eight dorsal spines *Tandya* Whitley, 1930.
- GG. Maxillary greatly produced backward in a
flexible lamella, about as long as head
..... *Opistognathus* Cuvier, 1816.

MEROGYMNOIDES CARPENTARIAE, sp. nov.

(Figure 4)

- Br. 6. D. x, 13; A. i, 12; P. i, 19; V. i, 4; C. 16 main rays. L. lat. 25?
Sc. c. 50. Tr. 3 1/2 to 10 on caudal peduncle. Predorsal scales 4.
Gill-rakers 11 + 20 on first branchial arch.
Head (25 mm.) 2.7, depth (20) 3.4 in standard length (68). Eye (7)
3.5. Maxillary (14) 1.7 in head. Interorbital (2) 3.5 in eye and half depth of
distal end of maxillary (4). Length of pectoral fin, 13 mm; length of ventral
fin, 15. Width of body, 11. Least depth of caudal peduncle, 9.
Head about as wide as deep, profile humped over eyes. Snout much
less than eye. Interorbital narrow, apparently without pores. Pores across
vertex of head. Preoperculum without spine. Two opercular spines. Nostrils
without tube. Gill-membranes united across narrow isthmus. Head naked.

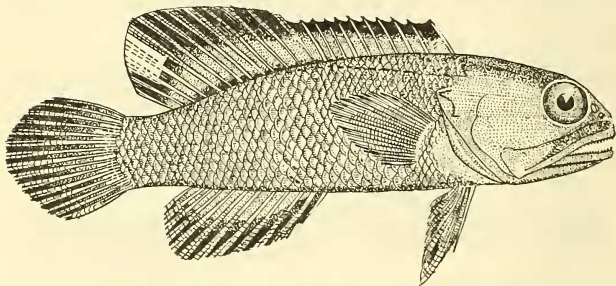


Figure 4—Jawfish, *Merogymnoides carpentariae*. Holotype. Queensland.
Helen Ashton del.

Maxillary shorter than head, truncate, extending a short distance behind eye. A single row of spaced teeth around each jaw. A hooked canine on each side of symphysis of upper jaw, with several smaller teeth, behind the uniserial outer teeth. Dental formula 34.34, teeth not villiform. Vomer and palatines with 25.25

only vestiges of teeth.

Trunk mostly naked in advance of a line joining pectoral base to origin of ventral fin. Body scales imbricate, cycloid. Lateral line near the back, reaching to beyond middle of dorsal fin-base, with about 25 tubes, terminating below first to fourth dorsal rays.

Dorsal spines weak, flexible, lower than rays, not split distally. Fins all rounded except for ventrals which are pointed and do not reach vent.

General colour, after preservation, pale yellowish-brown, becoming darker brown on top of head and over gill-openings and branchiostegal region. Eyes blue. Orbit almost surrounded by brown ring. No conspicuous dark "moustache"—mark at maxillary. A dusky symphyseal blotch. Paired fins light brown. Unpaired fins mostly blackish, the dorsal with a median cream band, the anal with a basal one.

Described and figured from the holotype specimen, 83 mm. or 3¼ inches long, one of two examples obtained in 1964 by the C.S.I.R.O. Gulf Prawn Survey. Australian Museum registered no. IB.7145. Paratype in C.S.I.R.O. collection.

Locality—Gulf of Carpentaria, Queensland.

Apparently nearest *Merogymnus eximius* Ogilby, 1908, but differing in the following salient characters:—

- A. Scales extend forward on the trunk to below the middle of the adpressed pectorals; they are small and very numerous. L.lat. with about 80 tubes. Body with large golden spots. Gill-rakers 26 on lower portion of first branchial arch ... *Merogymnus eximius*.
 - AA. Scales extend much farther forward, leaving only a small portion of breast naked. L.lat. with less than 30 tubes; scales on body larger and fewer, in about 50 transverse rows. Body without large golden spots. Gill-rakers 20 on lower portion of first branchial arch ... *Merogymnoides carpentariae*, gen. et sp. nov.
- "*Opisthognathus*" *versluysi* Weber, 1913, from Indonesia, differs in formulae, proportions and coloration, and so does *Gnathypops evermanni* Jordan & Snyder, 1902, from Japan, which is superficially similar; the latter species has recently been figured from Vietnam by Fourmanoir (1965, Cahiers O.R.S.T.O.M., spec. no., p. 75, fig. 48). *Opisthognathus macrolepis* Peters, 1866, from Bangkok, has more fin-rays and scales and slenderer build.

Family CONGROGADIDAE.

Genus CONGROGADOIDES Borodin, 1933.

CONGROGADOIDES SPINIFER Borodin.

(Figure 5)

Congrogadus spinifer Borodin, 1933, Ann. Rept. Direct. Mus. Comp. Zool., 1932-33: 45. Australia. Nomen nudum.

Congrogadoides spinifer Borodin, 1933, Copeia, 1933 (3): 141. Broome, W. Austr. Id. Whitley, 1964, Austr. Nat. 12 (4): 8 (Darwin, N. T.). Id. Smith, 1952, Ann. Mag. Nat. Hist. (12) 5:85.

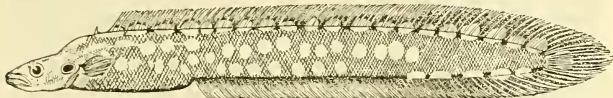


Figure 5—Dagger Fish, *Congrogadoide spinifer*. Queensland.
Helen Ashton del.

Here figured for the first time from a specimen (Austr. Mus. regd. no. IB.6931), taken from a large sponge, trawled about 18 miles N.E. of the mouth of the Albert River, Gulf of Carpentaria, Queensland; 7th Dec. 1963; collected by Drs. J. Yaldwyn and D. F. McMichael. Total length 145 mm. or 5.7 inches.

The species is known from north-western Australia, across the Northern Territory to Queensland.

Family GOBIOMORIDAE.

Genus PRIONOBUTIS Bleeker, 1874.

PRIONOBUTIS MICROPS (Weber).

Pogoneleotris microps Weber, 1908, Nova Guinea, 5: 258, pl. 12, figs. 4a and 4b. Tawarin & Merauke Rivers, New Guinea.

Two specimens (Austr. Mus. regd. nos. 6883 & 7148) from the Gulf of Carpentaria.

New record for Queensland.

Family BATHYAPLOACTIDAE.

Bathyaploactinae Whitley, 1933, Rec. Austr. Mus. 19: 102. Bathyaploactidae Beaufort, 1962, Fish. Indo-Austr. Archip. 11: 91.

KARUMBA, gen. nov.

Type-species—*Bathyaploactis curtisensis ornatisissimus* Whitley, 1933, but not the nominate species, *B. c. curtisensis*.

Differs from all other genera of the family (*Bathyaploactis* Whitley, 1933, *Acanthosphex* Fowler, 1938, and *Kleiwegia* Beaufort, 1952) in having four, pungent anal spines, instead of fewer, weak ones. The gill-opening extends to below the preopercular margin. Other characters are as defined for the family by the above authors, and as described for the species below. Very few fishes have four anal spines: the South African Scorpaenid, *Sebastesemus*, sometimes has four, but the insertion of its dorsal fin and many other characters are quite different from this novelty.

KARUMBA ORNATISSIMA (Whitley).

(Plate xiv)

Bathyaploactis curtisensis ornatisissimus Whitley, 1933, Rec. Austr. Mus. 19: 103, pl. xiii, fig. 2. North-western Australia.

D. xiv, 7; A. iv, 6; P. 11; V. i, 2; C. 12. L.lat. about 8 tubes.

Head (18 mm.) 2.6, depth (17) 2.8 in standard length (48).

Head compressed, with no deep pits or grooves. An inconspicuous barbel each side of chin and a row of papillae. Lower jaw terminal. Maxilla truncate, reaching below front of eye. Teeth in fairly broad villiform bands on both jaws and vomer, but not on palatines. Mouth oblique. Tongue bluntly rounded, free. One bony, blunt-tipped upper and a short lower preorbital spine. Suborbital stay smooth. Eye lateral, united with skin of head. Interorbital narrow, three-crested. Preoperculum with four prominent blunt spines. Head ending in two lobes, each with a weak opercular spine. No spines on top of head or shoulders. Gill-opening extending forward to below preopercular margin; isthmus broad. Seven, round, pad-like gill-rakers on first branchial arch.

Deep and compressed, width about $\frac{1}{2}$ depth. Body smooth with rudimentary scales apparent below epidermis. Lateral line with about eight tubes, the posterior ones with small skinny flaps. No papillae or tentacles. Lateral line gently curved anteriorly, highest below 5th or 6th dorsal spines, thence running along side of tail, consisting of 8 tubes without spines. Caudal peduncle longer below than above.

Dorsal fin originating over eye, with 14 strong spines, 2nd to 3rd longest, membranes incised. Rays longer, simple, articulated. Last dorsal ray joined to caudal peduncle immediately before caudal fin. Last anal ray before this. Anal with four spines and six soft rays, its origin below 12th dorsal spine, its fourth spine longest, shorter than rays, of which 3rd is longest. Pectoral with subvertical base. 11 simple rays, fifth from top longest and almost reaching

soft dorsal and anal fins; margin of fin rounded, membranes incised, no detached lower ray. Ventral below opercular flap, with a strong spine whose length is nearly half that of head, and two simple rays, the first longer. Caudal rounded, with 12 simple rays, longest subequal to head.

Colour in formalin, white, densely mottled with irregular light brown markings which tend to form crossbars on interorbital and below spinous dorsal fin. Lower surface of head and belly white. The darkest markings are almost blackish and occur on the fins: notably the middle of the first dorsal, the second dorsal and anal and the edges of the pectorals, ventrals and caudal. Eye blue. Pectoral axil plain.

Described and figured from a specimen $2\frac{1}{2}$ inches overall in the collection of the Gulf Prawn Survey, Karumba, Queensland. A smaller one (no. IB.7143) in Australian Museum with same data.

Locality—Gulf of Carpentaria, Queensland; Haul 452 = S.E. of Bentinck Island, $\frac{1}{2}$ way to Nicholson R., Q. $3\frac{1}{2}$ fathoms. (C.S.I.R.O. Gulf Prawn Survey).

New record for Queensland.

Explanation of Plates

Plate xiii—Sole, *Strabozebrias munroi*. Holotype. Queensland.

Photo:— C. V. Turner,
Australian Museum.

Plate xiv—Wasp Fish, *Karumba ornatissima*. Queensland.

G. P. Whitley del.